IN THE CLAIMS:

Please cancel claims 46-85. Claims 1-45 have been cancelled by previous amendment. Please add new claims 86-123 as follows:

Claims 1-85 (cancelled).

86. (new) A method of treating small intestinal bacterial overgrowth in a human subject comprising:

detecting the presence of small intestinal bacterial overgrowth in the subject; and

at least partially eradicating the small intestinal bacterial overgrowth by depriving the bacterial overgrowth of nutrients.

87. (new) The method of claim 86, wherein depriving the bacterial overgrowth of nutrients further comprises causing the subject to consume a diet comprising nutrients that are at least partially predigested.

88. (new) The method of claim 87, wherein the diet is consumed for at least 3 days.

89. (new) The method of claim 87, wherein the diet is consumed for 3 to 18 days.

90. (new) The method of claim 87, wherein the diet is consumed for 10 to 14 days.

91. (new) The method of claim 87, wherein the diet comprises a total enteral nutrition formulation.

92. (new) The method of claim 91, wherein the total enteral nutrition formulation is consumed for at least 3 days.

93. (new) The method of claim 91, wherein the total enteral nutrition formulation is consumed

for 10 to 14 days.

94. (new) The method of claim 87, wherein the diet comprises VIVONEX®.

95. (new) The method of claim 94, wherein the VIVONEX® is consumed for at least 3 days.

96. (new) The method of claim 94, wherein the VIVONEX® is consumed for 10 to 14 days.

97. (new) The method of claim 86, wherein depriving the bacterial overgrowth of nutrients further comprises administering to the subject a pancreatic enzyme supplement before or substantially simultaneously with a meal.

98. (new) The method of claim 86, wherein depriving the bacterial overgrowth of nutrients further comprises enhancing the digestion and/or absorption of the nutrients in the upper gastrointestinal tract of the subject by slowing transit of the nutrients across the upper gastrointestinal tract of the subject.

99. (new) The method of claim 98, wherein enhancing the digestion and/or absorption of the nutrients in the upper gastrointestinal tract further comprises administering a pharmaceutically acceptable composition to the subject by an oral or enteral delivery route, the subject having an intrinsic cholinergic afferent neural pathway projecting from a peptide YY-sensitive primary sensory neuron in the intestinal wall of the subject to a prevertebral celiac ganglion and having an adrenergic efferent neural pathway projecting from the ganglion to one or more enterochromaffin cells in the intestinal mucosa and/or to a serotonergic interneuron linked in a myenteric plexus and/or submucosa plexus to an opioid interneuron, the opioid interneuron also being linked by an intestino-fugal opioid pathway projecting to the ganglion, with one or more neural connections to the central nervous system and back to the gut projecting from the ganglion, the pharmaceutically acceptable

composition comprising an active agent, the active agent being selected from the group consisting of:

(a) active lipids;

(b) serotonin, serotonin agonists, or serotonin re-uptake inhibitors;

(c) peptide YY or peptide YY functional analogs;

(d) calcitonin gene-related peptides of functional analogs thereof;

(e) adrenergic agonists;

(f) opioid agonists;

(g) combinations of any of (a), (b), (c), (d), (e) and/or (f); and

(h) antagonists of receptors for any of (b), (c), (d), (e) and/or (f),

the active agent being delivered in an amount and under conditions such that the cholinergic intestino-fugal pathway, at least one prevertebral ganglionic pathway, the adrenergic efferent neural pathway, the serotonergic interneuron and/or the opioid interneuron are activated by the action of any of (a) through (g), whereby the rate of upper gastrointestinal transit in the subject is slowed.

100. (new) The method of claim 98, wherein enhancing the digestion and/or absorption of the nutrients in the upper gastrointestinal tract further comprises administering a gastrointestinal transit-slowing composition comprising a carrier and a dispersion consisting essentially of an active lipid in the carrier, the active lipid being selected from the group consisting of saturated and unsaturated fatty acids, fully hydrolized fats and mixtures thereof, in an amount and in a form effective to promote contact of the active lipid with the small intestine of the subject, whereby the rate of gastrointestinal transit time is slowed.

101. (new) The method of claim 100, wherein the active lipid is selected from the group consisting of caprolic acid, caprulic acid, capric acid, lauric acid, myristic acid, oleic acid, palmitic acid, stearic acid, palmitoleic acid, linoleic acid, linolenic acid, trans-hexadecanoic acid, elaidic acid, columbinic acid, arachidic acid, behenic acid, eicosenoic acid, erucic acid, bressidic acid, cetoleic acid, nervonic acid, Mead acid, arachidonic acid, timnodonic acid,

clupanodonic acid, decosahexaenoic acid, pharmaceutically acceptable salts thereof and mixtures thereof.

102. (new) The method of claim 100, wherein the active lipid is oleic acid or a pharmaceutically acceptable oleate salt.

103. (new) The method of claim 99, wherein the active agent is selected from the group consisting of serotonin, serotonin agonists, serotonin re-uptake inhibitors, 5-HT3 receptor agonists and 5-HT4 receptor agonists.

104. (new) The method of claim 99, wherein the active agent is serotonin.

105. (new) A method of treating irritable bowel syndrome in a human subject comprising:

detecting the presence of small intestinal bacterial overgrowth in the subject; and

at least partially eradicating the small intestinal bacterial overgrowth by depriving the bacterial overgrowth of nutrients.

106. (new) The method of claim 105, wherein depriving the bacterial overgrowth of nutrients further comprises causing the subject to consume a diet comprising nutrients that are at least partially predigested.

107. (new) The method of claim 106, wherein the diet is consumed for at least 3 days.

108. (new) The method of claim 106, wherein the diet is consumed for 3 to 18 days.

109. (new) The method of claim 106, wherein the diet is consumed for 10 to 14 days.

110. (new) The method of claim 106, wherein the diet comprises a total enteral nutrition formulation.

111. (new) The method of claim 110, wherein the total enteral nutrition formulation is consumed for at least 3 days.

112. (new) The method of claim 110, wherein the total enteral nutrition formulation is consumed for 10 to 14 days.

113. (new) The method of claim 106, wherein the diet comprises VIVONEX®.

114. (new) The method of claim 113, wherein the VIVONEX® is consumed for at least 3 days.

115. (new) The method of claim 113, wherein the VIVONEX® is consumed for 10 to 14 days.

116. (new) The method of claim 105, wherein depriving the bacterial overgrowth of nutrients further comprises administering to the subject a pancreatic enzyme supplement before or substantially simultaneously with a meal.

117. (new) The method of claim 105, wherein depriving the bacterial overgrowth of nutrients further comprises enhancing the digestion and/or absorption of the nutrients in the upper gastrointestinal tract of the subject by slowing transit of the nutrients across the upper gastrointestinal tract of the subject.

118. (new) The method of claim 117, wherein enhancing the digestion and/or absorption of the nutrients in the upper gastrointestinal tract further comprises administering a pharmaceutically acceptable composition to the subject by an oral or enteral delivery route, the subject having an intrinsic cholinergic afferent neural pathway projecting from a peptide YY-sensitive primary sensory neuron in the intestinal wall of the subject to a prevertebral celiac ganglion and having an adrenergic efferent neural pathway projecting from the

ganglion to one or more enterochromaffin cells in the intestinal mucosa and/or to a serotonergic interneuron linked in a myenteric plexus and/or submucosa plexus to an opioid interneuron, the opioid interneuron also being linked by an intestino-fugal opioid pathway projecting to the ganglion, with one or more neural connections to the central nervous system and back to the gut projecting from the ganglion, the pharmaceutically acceptable composition comprising an active agent, the active agent being selected from the group consisting of:

(a) active lipids;

(b) serotonin, serotonin agonists, or serotonin re-uptake inhibitors;

(c) peptide YY or peptide YY functional analogs;

(d) calcitonin gene-related peptides of functional analogs thereof;

(e) adrenergic agonists;

(f) opioid agonists;

(g) combinations of any of (a), (b), (c), (d), (e) and/or (f); and

(h) antagonists of receptors for any of (b), (c), (d), (e) and/or (f),

the active agent being delivered in an amount and under conditions such that the cholinergic intestino-fugal pathway, at least one prevertebral ganglionic pathway, the adrenergic efferent neural pathway, the serotonergic interneuron and/or the opioid interneuron are activated by the action of any of (a) through (g), whereby the rate of upper gastrointestinal transit in the subject is slowed.

119. (new) The method of claim 117, wherein enhancing the digestion and/or absorption of the nutrients in the upper gastrointestinal tract further comprises administering a gastrointestinal transit-slowing composition comprising a carrier and a dispersion consisting essentially of an active lipid in the carrier, the active lipid being selected from the group consisting of saturated and unsaturated fatty acids, fully hydrolized fats and mixtures thereof, in an amount and in a form effective to promote contact of the active lipid with the small intestine of the subject, whereby the rate of gastrointestinal transit time is slowed.

120. (new) The method of claim 119, wherein the active lipid is selected from the group consisting of caprolic acid, caprulic acid, capric acid, lauric acid, myristic acid, oleic acid, palmitic acid, stearic acid, palmitoleic acid, linoleic acid, linolenic acid, trans-hexadecanoic acid, elaidic acid, columbinic acid, arachidic acid, behenic acid, eicosenoic acid, erucic acid, bressidic acid, cetoleic acid, nervonic acid, Mead acid, arachidonic acid, timnodonic acid, clupanodonic acid, decosahexaenoic acid, pharmaceutically acceptable salts thereof and mixtures thereof.

121. (new) The method of claim 119, wherein the active lipid is oleic acid or a pharmaceutically acceptable oleate salt.

122. (new) The method of claim 118, wherein the active agent is selected from the group consisting of serotonin, serotonin agonists, serotonin re-uptake inhibitors, 5-HT3 receptor agonists and 5-HT4 receptor agonists.

123. (new) The method of claim 118, wherein the active agent is serotonin.